

# MAINE FARMER

## AND JOURNAL OF THE USEFUL ARTS.

BY WILLIAM NOYES & CO.]

"OUR HOME, OUR COUNTRY, AND OUR BROTHER MAN."

[E. HOLMES, EDITOR.]

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### THE MAINE FARMER

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SOME OF THE MEANS OF ELEVATING THE

CHARACTER OF THE WORKING CLASSES.

Lecture delivered at the Close of the Winter Course

1833-34, of the Franklin Institute of Philadelphia. By

J. K. MITCHELL, M. D., Prof. of Chem. Applied to

the Arts. Frank. Inst.

(Continued.)

If we carefully weigh the conditions essential to the honorable reputation of any profession, or class of individuals, they will be found chiefly in the degree of moral cultivation demanded either by usage or by business. For this reason the divine, the lawyer, and the physician, pursue avocations held in the highest respect in every country where they are really learned professions. In these employments the books to be consulted are numerous, and many of them in foreign or dead languages. To the due comprehension of these, a good preliminary education is indispensable. The gentlemen therefore of law, divinity, & medicine, are generally possessed of a considerable degree of classical learning, which, elevating their taste, and refining their sentiments, renders them both agreeable and instructive companions, and makes them welcome, as such, to the best society, of which they become an essential and important part. But to the successful cultivation of most, if not all, of the mechanic arts, a preliminary education, beyond the mere elements of the vernacular language, has unfortunately not been esteemed necessary; and hence, as a class, mechanics have not been noted for those companionable qualities, which giving zest and grace to society, render their possession a desirable acquisition. How seldom is a youth, destined for a handicraft business, found passing through the ordinary routine of a college course, or employed in the acquisition of the foreign languages, in which may be found written much which, as an artisan, it would import him to know. The loss thus sustained is of much greater importance than, on a superficial observation, may be made to appear. It is in the gentle breast of tractable childhood, that we must plant the seeds of the tender and delicate sentiments. It is then alone that the mind receives a graceful flexibility, and imbibes a taste for elegant pursuits, and refined sentiments. Our original nature is so rough, selfish and cold, that it requires years of sentimental culti-

vation to tutor it into smoothness, self denial, and generous warmth, so essential to the harmony, the elegance, and the interest of social intercourse. This is almost instantly perceived by an uneducated man, when brought by the force of circumstances into the presence of those who have enjoyed the invaluable blessing of a good education. If he is observant, he will be forcibly struck with the charms of good society, and will lament, as thousands have done, that the opportunity of acquiring such things is gone, gone forever. Altho' there are men so constituted by nature as to need little polish from the study of the schools and the example of cultivated minds, they are not common; and the fine lines of Pope will be found generally true

"Tis education forms the common mind,  
Just as the twig is bent the tree's inclined."

When we carefully examine this passage, we are struck with the exception implied by the word "common." Pope, who has written on the ruling passion, knew well, that men of peculiar moral conformation could not be formed by education, but used education for the promotion of favorite pursuits.

Examples of men rising superior to the obstacles of ignorance and poverty into a surprising degree of consequence, are however much more common than those of escape from the contamination of early bad manners, to agreeable ease, and acceptable social elegance. But even such instances, if more common, should not prevent a parent who designs his son for a mechanical pursuit, from giving him, if practicable, a good classical education. Such a course would appear singular at first, but, if generally followed, would cease to attract notice; and the favorable difference in the social consequence of a highly educated mechanic would attract a crowd of imitators; and after no very protracted period, the artificial barrier now left standing between various classes of society would be broken down, and the last relics of our feudal origin and transatlantic prejudices would be extinguished. That, however, must be done by the mechanics themselves. They must cultivate the means of advancement, to be advanced; and cannot rationally complain, if, having deprived their sons of the ordinary accomplishments of good society, they should be kept out of it by a sense of their own inferiority, or the good taste of those who compose it.

It may be said that a mechanic has not time for the pursuit of classical and elegant literature, and that, if possessed, it could not promote the interests of his business. There is time. If a boy, whose mind has been disciplined by education and whose intellect has been sharpened by exercise in the schools, be finally sent to the study of

a trade, he will not only learn it in a shorter time, but he will learn it better, less mechanically, and more intellectually. It will scarcely be denied that as much time is necessary to learn the science of medicine as to acquire a knowledge of any other art whatever; yet we perceive that in three or four years, a clever student of physic possesses himself of an amount of science which would appear incredible to one unused to the acquisitive power of early training, and habitual mental exertion. The preliminary moral GYMNASIUM of his classical schools gives such force, flexibility, and retentiveness to his faculties, as to enable him to do in three or four years what, without such preparation, he could not, even if at all possible, accomplish in twice as many.

If such an education were usual with mechanics, it would afford them a new and elegant recreation, without diminishing their zeal for their art. And as their art would, by such means, become itself more respectable, they would not feel themselves degraded in its pursuit. In a solitary road of upper Virginia I was attracted by the appearance of a Yankee pedler, who, with great enthusiasm, recited verses from a copy of Virgil, descriptive of a scene similar to a very striking one then before him. I naturally inquired into the history of such an individual so engaged. He informed me that his father had given him a good classical and philosophical education, and had brought him up to the business of a tin-smith. At this trade he had worked assiduously for many years, during which he had beguiled his hours of leisure by classical reading. "Virgil, sir," said he, "is my favorite author, and I never go on a journey without him. He is good company. He shortens the way, enlivens an evening, or a rainy day at a tavern, and enables me to bear better the usual adversities of my diversified life. I make my tins myself, harness my horse, load my waggon, and journey now and then to the south to sell them." Here you see that a classical scholar, a man of taste, in fact a cultivated philosopher, was not ashamed to pursue a very common mechanical business, and he did it with skill and attention. It was the custom of his home, familiar to him, and it elevated not only the individual, but the business. Time too had been found, not only by him, but by many others in his neighborhood, to educate themselves classically before they entered on a trade. It does not appear that their time was lost, even with reference to their business, since they were quite as skillful in it as those who went to it early, and brought less sharpened understanding to the work.

Even if MONEY were the sole object of life, the chance of its attainment would not



be lessened by a good preliminary education. But money can be valued properly only as the means of obtaining rational enjoyment. If, then, in a refined education are found new sources of pleasure, new powers of promoting happiness, and respectability, we have one of the best things that money can buy—a good, too, not as easily lost as money; and which, after our youth has gone by, cannot be purchased by the wealth of the world. Bodily activity is so natural to youth, that all young animals are, when awake, in constant motion. It is almost impossible for one of riper years to follow a child through the evolutions of a single day. The little fellow, obedient to impulse, exerts every muscle, stimulates every nerve, trains every member, and every sense, for future use, and happily seldom requires either solicitation or instruction, to prepare himself *physically* for his part in the drama of life. Nor does nature forget to train, at the same time, his moral powers. The acquisition of knowledge made by the time a child reaches the end of its third year is stupendous. But while the muscular education goes on as rapidly as ever, the moral exertion begins from that period to decline, and a less stimulated curiosity exerts over the mental faculties a less active control; and unless a systematic education be substituted for the waning discipline of nature, the mind becomes listless and less enterprising, loses its habitual acuteness, and presents to the observer the man of nature, such as our aboriginal people, active, strong, cunning, incurious, ready for war, for hunting, or the dance, but averse to moral labor, and insusceptible of all the softer and more elevated enjoyments of life.

The want of that cultivation which, by exciting his more tender and graceful sentiments, best fits a man for the society of females, while it steals from him the sweetest and purest enjoyments, deprives those who have a right to expect better things at his hands, of all that delightful intercourse which classical taste and literary refinement can alone produce. Sensible of this, coarse and vulgar men are seldom found, at nightfall, within the precincts of home. Incapable of entering into the feelings, or of participating in the gentle pleasures of domestic life, they are found congregated together in lodges, at taverns, at shows, or theatres, or in any place where they may find refuge from vacuity in strong excitement. Their women are left to themselves; and all of a father which his child can know, is as an eating animal at meal times, and an absentee at night. Such is the result of a want of refined education in any class, or in almost any individual; and if large and very important sections of society voluntarily abstain from such improvement of themselves and their children, although they may occasionally present, as I know they do, many very honorable examples to the contrary, yet, as a class, they must suffer a loss, both in the means of happiness and the estimation of society.

The neglect of classical education, among those to whom it was formerly deemed an

indispensable accomplishment, is among the most alarming signs of a decay in one of the most interesting departments of American civilization. By degrees, merchants and others, engaged in pursuits not immediately dependant on classical learning, have imbibed the opinion, that an acquaintance with elegant literature disqualifies a man for business, and that few of those who have a classical taste or predilection succeed in the active duties of life. It is true, that when a man gives superior attention to his amusements of any kind, and postpones his occupation and his interest for his pleasures, he will fall short of success. A theatre—a grog shop—a club—may also trench too much on a man's time and attention, and work his ruin more effectually than Milton or Homer, and that too without leaving him those bright fragments of enjoyment, which, amidst broken fortunes, remain for him who has preserved his innocence and his taste. The objections to learning, like the objections to all that is good in itself, are necessarily derived solely from its abuse, and ought not to militate against its use. In Europe, many of the merchants, whose financial skill has filled the world with their renown, are men of high finish and elegant accomplishments; and in Boston, it is a very common thing to find the student of Greek and Latin classics in the counting-house, there distinguished for the skillfulness of his speculations, and the wealth acquired by his wisdom. With us, unfortunately, the opinion of its hurtfulness leaves us but few opportunities to judge of its value, and unless we soon divest ourselves of this absurd prejudice, we shall not be able to find at home the seminaries in which it will be possible to recover our lost ground. Already they present strong symptoms of decay, and in a few years, unless the working classes will in this, as they do now in many other things, set a noble example to those who have voluntarily divested themselves of the only rational ground of distinction, our colleges and classical schools must entirely disappear. In the city of Philadelphia, there are probably not less than thirty thousand families. If in each of one third of these families, there exists one young man of a fit age for college, we have at least from five to ten thousand young men qualified by age, at least, to be in the course of education in such an institution. But will it not surprise you when I say, that Philadelphia does not send to all the colleges of the Union a number of young men sufficient, if collected together, to well support one single institution. Since I have been familiar with this subject, there have not been more than one hundred and fifty youths of Philadelphia, at one time, at all the colleges of the Union. Nor has this arisen from a deficiency of skill in the professors, either here or elsewhere. At this moment our own University is rich in the means of instruction, and at a rate which would not tax severely the purse of the poorest master-mechanic; and I do trust that, in a very few years, the institution in whose Hall I now address you, will present still

cheaper access to elegant, as it now does to scientific education.

Amidst so many things to admire in our and our institutions, even the most friendly foreigner observes with regret our deficiency in elegant literature, and the consequent infrequency of writers of taste. We are free, well informed, industrious, affluent, ingenious; but we are grave, deficient in enthusiasm, and almost wanting in the higher graces of conversation and literature, to which society owes, elsewhere, its greatest charm, and without which we lose much of the sweetest enjoyments of life. Much as I love my home, great as on the whole I prefer this my native land, to every other, and I have seen them nearly all, still, knowing as I do the great enjoyment to be found in that society where the mind of almost every one is refined by acquaintance with the polite writers of every age and country, I cannot resist the feeling of regret at the loss we voluntarily incur, nor can I refrain from expressing the hope, that the time is not far distant, when high refinement and manual labor will not be found incompatible, and when our mechanics will be entitled, in the very best sense of the word, to the name of gentlemen. Coarseness and vulgarity are disgusting, even to the vulgar, for there is no man, however gross himself, who does not feel pleased at the improved manners and literary attainments of his son; just as there scarcely ever existed a drunkard who did not love to see his child averse to the destructive vice to which he had himself become the victim.

[To be continued.]

## THE FARMER.

WINTHROP, FRIDAY MORNING, SEPT. 26, 1834.

### CATTLE SHOW AND FAIR.

The annual Cattle Show and Fair of the Kennebec County Agricultural Society, took place on the 17th and 18th ult. The weather was delightful, and, considering that military reviews were held in the neighboring towns on both days, it was well attended.

In a few respects the Show was better than that of last year—but in many other respects it was not so good. The show of heifers and milch cows was as good or better than last year.—Some fine cattle of the last description, belonging to Mr Sanford Howard, and some from Mr Charles Vaughan's herd—some also belonging to Mr Sturtevant—and others whose owners we did not know. The fine full blooded Bull, "MAINE DENTON" belonging to Capt. Pierce of Readfield was upon the ground, as was also DARLINGTON, a full blood bull of good points, belonging to Major Thing of Mt. Vernon.—Many other bulls of various grades, shapes and pretensions were also exhibited.

The show of working oxen was not quite equal to last year. That of horses and mares was more numerous, and some elegant horses were brought out. The SWINE department was well filled, but we think not better than at the last Show. Of Sheep there was not so many.



The number of manufactured articles was not so great as we wished to see. What were exhibited did credit in general to the manufacturer, but we regret to see so little interest taken in this department. Perhaps the Society would do well to bestow a little more encouragement upon such articles. Some finely formed and well made ploughs were upon the ground, of which, we noticed those made by Col. Stone of Gardiner, were particularly neatly made.

Articles from the Dairy, fell short both as it regards quantity and quality. We do not wish to say that the butter and cheese exhibited was not good, but there was not enough of it, neither was it perfect. Our Dairy women must rouse up. It will never do to be so far in the back ground. And if the Society can adopt some mode to increase the interest in these things, it will not be lost. Had there been an abundance of these articles of first rate quality, they would have sold well upon the spot.

The Dinner was served by Mr A. M. Shaw, with his usual skill and good fare. Specimens of grapes—melons, peaches and pears, were sent up by the Farmer's old and tried friend, Mr Benjamin Vaughan of Hallowell. They excited renewed and lively sentiments of respect for one who will be held in high regard while living, and whose memory will be cherished with gratitude and veneration hereafter.

On Thursday, the ploughing match took place, which excited much interest and animation, and the work was done up in good style; after which, the Society repaired to the Meeting house and listened with deep interest, to an able and very appropriate Address from the Rev. Mr. Thurston, when the several Reports were read.

The Choir performed their part with spirit, and to the no small satisfaction of the audience.

On the whole, there were many things to call forth feelings of satisfaction and gratitude, and but few for animadversion. Those few we hope not to see again.

#### SOCIETY OF WOOL GROWERS.

A convention of wool growers has been called at Bradford, N. H. to take into consideration the subject of wool growing, and to endeavor to establish uniformity of prices among themselves. We think it advisable for our wool growers to open a correspondence with them, and if possible act in concert. If they do, we hope it will make ours stick to their text.

**PEACHES.** A fine specimen of peaches, grown in the garden of Col. Fillebrown, of East Winthrop, was handed us last week. There can be no doubt but that, with half the pains that the English take to raise this delicious fruit—we should succeed well in its culture. The principal difficulty is in carrying the trees safely through our winters.

**THE WEATHER.**—The weather since the 13th has been very warm indeed. The dan-  
delions are throwing out their blossoms anew, and the strawberry blows are peeping out of

their buds to see whether May day hasn't taken a back track, and found it a shorter cut than the old rout.

**CORRECTION.**—In our last—p. 282, column 3d, for MIND read MINE—p. 284, column 1st, for TAP read TOP—column 2d, for POTASHES read PARTAKES.

For the Maine Farmer.

**MR. HOLMES:**—As the farming season is drawing to a close, and the evenings getting long, it will afford opportunity and leisure for your correspondents to relate through the columns of your paper what new discoveries, improvements or observations they have made the past season in the science of agriculture. No one should neglect to do this, for by being made acquainted with the course pursued by others, and the result, we are enabled to adopt or shun it as it proves to be good or bad. It is of as much consequence to relate a failure of any crop, and the course pursued as a successful one, because it may lead others to investigate and perhaps ascertain the true cause of such failure. Holding this as a good principle, I will tell you what success I had in raising black sea wheat.

Last September I purchased one bushel of black sea wheat at the Agricultural Ware House, Boston. On the 5th day of October I wet one half of it, and mixed lime with it to dry it, and sowed it upon a piece of ground from which I had taken potatoes, which was considered in good order for wheat, having been well manured the spring previous. Late in the spring it came up very scattering, and made very slow progress in coming to maturity during, and finally the greater part of it blighted, and I hardly obtained so much as I sowed, and that is not suitable for seed.

The other half bushel was sown by a neighbor of mine on the 10th of October, on a piece of land in a very high state of cultivation, from which he had taken corn, which proved a total failure. As late in the Spring as the 8th or 10th of May, no appearance of vegetation being visible, he harrowed the ground over and sowed it to spring wheat, and obtained a good crop, but not a head of black sea wheat could be found on the piece at reaping time.

The failure of this attempt does not at all discourage me. I feel confident that winter grain can be raised to advantage in this section of the country, and I am determined to make another trial. I expect to receive a half bushel more in a few days, and intend to sow half of it late in the fall, and the other half to freeze and sow in the spring.

M. S.

Bradford, Sept. 10, 1834.

For the Maine Farmer.

#### APPLES FOR HOGS.

**MR. HOLMES:**—I began to feed my hogs upon apples on the tenth of the eighth month (August), and I thought that they gained very fast, but I wished to know. I therefore took a pig 4 month old, weighing 95 pounds, and kept him 18 days as follows—first, I gave him 2 bushels of sour apples, boiled with 6 quarts of oat and pea meal, weighing 4 1-2 lbs. At the end of 6 days he weighed 101 lbs. gaining 1 pound per day. I then kept him 6 days upon the same quantity of boiled sweet apples and meal, at the end of which time he weighed 107, gaining the same as before. I then kept him 6 days on boiled potatoes and meal, giving him the same quantity as of the apples and meal, and he weighed 112 lbs. gaining only 5 pounds—during this time I gave him nothing else, not even weeds; no doubt he would have

gained much more fed in the usual way of mixing the milk, &c. with it, but I wished to try a fair experiment, and therefore gave him nothing but the above stated. Pork at 5 cents per pound would give me 12 3-4 cents per bushel for the apples, and one cent per pound for the meal, and the potatoes amount to only 10 1-4 cents per bushel. Feeling entirely satisfied myself, I thought it might be of some benefit to communicate it to others, and recommend those who have orchards not to cut them down, but rather cultivate more, for if we can raise the great staple, pork, from our orchards, is it not worth attending to? or instead of making cider for \$1 per barrel, which will not pay the expense of making? You may also obtain your fuel from your orchard, for an orchard well pruned will afford enough to boil the apples. Hogs are more fond of sour apples than of sweet, when boiled, and I consider them worth full as much; though doubtless the sweet are worth the most when raw.

PAINE WINGATE.

Hallowell, 9 mo. 1834.

For the Maine Farmer.

**MR. HOLMES:** A farmer at a distance would enquire how much Indian corn on an acre of land produces, generally, annually, in the County of Kennebec, as now manured and cultivated—take one year with another for ten years past. He would further enquire, how much might there be raised to the acre, if much better manured and tended than has generally been the case. If a small portion of land highly manured and well tended were planted, could there not generally be raised 60 bushels per acre?—if so, it must be profitable, and will be to my mind, a great recommendation to the County. An answer from a farmer is requested.

J. L.

**CHINESE MULBERRY.**—The Mulberry seed, furnished to several persons in Massachusetts, by the Missionaries in China, have been extremely prolific, and the prospects are highly flattering for the manufacture of New England silk. The following extract from an intelligent and enterprising gentleman in Northampton, received within a few days, will be read with interest.—“My prospects brighten every day, as it regards the silk business. I receive encouragement from every quarter. Gentlemen of the first respectability, possessed of capital, are ready to engage in it. My trees have grown wonderfully. I shall sell twelve or fifteen hundred dollars worth this season, and shall propagate largely next season, if my life is prolonged. I wish you would come up here and settle yourself down. You will find it a delightful employment, to produce so rich a substance from the soil. It is a business which competition cannot affect, excepting for the better. For it is a fact that the more there are engaged in it, the better it will be for each one. The time is not far distant, when New England will produce Silk equal in value to the Cotton of the South—of this no one can doubt, who has given any attention to the subject. I have already calls from gentlemen from every quarter, to see my trees and obtain information about the business. I am now planning a building to be erected the coming winter for the feeding of worms—two hundred feet long by twenty-four feet wide, two stories high—which I shall place below the garden next to the woods. I have sold one thousand trees to a gentleman for \$250, and to others \$500 worth more; my number will soon be taken up.”—[Boston Courier.

Prescott, who was tried at Concord, N. H. for the murder of a Mrs Cochran, was convicted.



From the Genesee Farmer.

### ON DRAFT HORSES.

Among the "BUBBLES from the Brunnens of Nassau," we observe some things well adapted to those who subsist on solid food; and for our present number we select a few remarks on the different methods of training horses to the draft. The writer's views are at least plausible; and if we can point the attention of judicious proprietors of teams to this subject, we shall hope that some good will be the result.

We have often witnessed the uneasy constraint which horses suffer from having their heads reined up too high; and it has appeared to us that when they find trouble enough to reach the ground with their fore feet on level roads, they must be prevented from exerting their strength in the best manner, more especially when they come to ascend a hill. But we will now introduce our author:

"I reluctantly acknowledge that I do verily believe [the German] horses are much more scientifically harnessed for slow, heavy draft, than ours are in England.

"Many years have now elapsed since I first observed that, somehow or other, the horses on the continent managed to pull a heavy carriage up a steep hill, or along a dead level, with greater ease to themselves than our English horses. Let any unprejudiced person attentively observe with what little apparent fatigue three small ill-conditioned animals will draw not only his own carriage, but very often that huge overgrown vehicle, the French diligence, or the German eil-wagon, and I think that he will admit that, somehow or other, there exists a mystery.

"The thing I want, if possible, to account for, is, how such small weak horses do manage to draw one's carriage up hill, with so much unaccountable ease to themselves.

"Now, in English, French and German harness, there exists, as it were, three degrees of comparison in the manner in which the head of the horse is treated; for, in England, it is elevated, or borne up, by what we call the bearing rein; in France it is left as nature placed it (there being no common French harness bearing rein); and in Germany, the head is tied down to the lower extremity of the collar, or else the collar is so made, that the animal is by it deprived of the power of raising his head.

"Now, it is undeniable that the English extreme and the German extreme cannot both be right; and, passing over for a moment the French method, which is, in fact, the state of nature, let us for a moment consider which is best, to bear a horse's head up, as in England, or to pull it downwards, as in Germany.—In my humble opinion both are wrong; still there is some science in the German error: whereas in our treatment of the poor animal, we go directly against all mechanical calculation.

"In a state of nature, the wild horse, (as every body knows) has two distinct gaits or attitudes. If man, or any still wilder beast, come suddenly upon him, up goes his head; and as he first stalks and then trots gently away, with ears erect, snorting with his nose, and proudly snuffing up the air, as if exulting in his freedom; as one fore leg darts before the other, one sees before one a picture of doubt, astonishment, and hesitation,—all of which feelings seem to rein him, like a troop horse on his haunches; but attempt to pursue him, and the moment he defies you—the moment, determining to escape, he shakes his head, and lays himself to his work, how completely does he alter his attitude!—for then

down goes his head, and from the ears to the tip of his tail, there is in his vertebrae an undulating action which seems to propel him, which works him along, and which it is evident you could not deprive him of, without materially diminishing his speed.

"No the same true th either which I poweration, a attitude other b In ordi rect a ing str do you cold v not av instead it into you not has pre the sar "We a by the not alle "In horses courage downw collars that, w horse's and th gently proper "Th

resistance which he meets with, and his weight being infinitely greater than his draught (I mean the balance being in his favor,) the carriage follows him without much more strain or effort on his part, than if he was idly leaning his chest against his manger. It is true the flesh of his shoulders may become sore from severe pressure, but his sinews and muscles are comparatively at rest.

"Now, as a contrast to this picture of the German horse, let any one observe a pair of English post-horses, dragging a heavy weight up a hill, and he will at once see that the poor creatures are working by their muscles, and that it is by sinews and main strength the resistance is overcome; but how can it be otherwise? for their heads are considerably higher than nature intended them to be even in walking in a state of liberty, carrying nothing but themselves. The balance of their bodies is, therefore, absolutely turned AGAINST, instead of leaning in favor of, their draft; and thus cruelly deprived of the mechanical advantage of weight which every where else in the universe is duly appreciated, the noble spirit of our high fed horses induces them to strain and drag the carriage forward by their muscles; and if the reader will but press his hands down the back sinews of one of our stage-coach or post chaise horses, he will soon feel (though not so keenly as they do) what is the fatal consequence. It is true that, in ascending a very steep hill, an English postillion will occasionally unhook the bearing-reins of his horse; but the poor jaded creatures, training for years to work in a false attitude, cannot in one moment get themselves into the scientific position which the German horses are habitually encouraged to adopt; besides this we are so sharp with our horses—we keep them so constantly on the QUI VIVE, or, as we term it, in hand—that we are always driving them from the use of their

weight to the application of sinews.

"That the figure and attitude of a horse working by his sinews, is infinitely prouder than when he is working by his weight, (there may exist, however, false pride among horses as well as among men,) I most readily admit

# TIGHT BOU

itate against this doctrine, for the earths and metals are likewise formed by a union of the same gases, combined with their peculiar bases, which are volatile. Clay, sand, and lime are composed, as we shall hereafter show, by the combination of oxygen gas, with the peculiar metallic bases which form these several earths. If then we may be permitted to suppose that the matter of these several bases, which are known to be extremely volatile, are present in the circulating sap, and we do not see why that supposition may not as well be indulged in as any others that are adopted, we shall then have present all the constituent principles of the earths, in a gaseous state; and by simply obeying the laws of affinity their particles will unite and compose the different earths within the vegetable substance.

The constituent principles of vegetable matter are very simple, and are reduced principally to these three, oxygen gas, hydrogen gas, and carbonic acid gas. To these three principles merely, all vegetable substances may be reduced:

All that endless variety of appearance, which present itself in the vegetable kingdom; the stately oak, and the tender daisy; the hardy lignumvitae, and the pulpy mushroom; the poisonous opus, and the healing balm; the nauseous assafoetida, and the sweet-scented rose; together with all the various colors, shades, and tints, presented to us in the flowers and foliage which cover the earth, have all been composed from the three gases we have mentioned. Not only in these different vegetables separately, do they compose such opposite substances, but from the same trunk, and from the same apparently homogenous mass of sap, are compounded substances as opposite in their qualities as any that have been mentioned:—for instance, the seed of the stupifying



poppy produces an oil as bland as the olive, and is cultivated in great quantities in France for table use; while from the milky juice extracted from its head, is produced opium of our shops: and the delicious pulp of the peach, encloses in its kernel a poison as deadly as arsenic.

M. Polydore Boullay to constitute a leading principle in soils and manures. Humin appears to be formed of carbon and hydrogen, and the humic acid of humin and oxygen. Pure humin is deep blackish brown, without taste or smell, and water

great difficulty and in consequence it cannot, as food for plants. However, which, I may repeat, the taste, readily combines the substances found in, and not only renders so, easy to be dissolved in their separate state. In this way humic with lime, potass, and iron of humates, and these will render it so fit to be taken up by the root fibres.

have been from ignorance of the humic acid dissolve earthy matters, others were so puzzled to see and potass got into is also to be this chiefly treated of in the older names of extractive, vegetable matter, and the for instance, filled a large and moistened it thor-water, when by putting by weight under a heavy and evaporating the twenty six parts of what; from 10,000 parts of ch kitchen garden mould

he obtained ten parts of extract; and from 10,000 parts of good corn field mould, he obtained four parts of extract.

M. Polydore Boullay found that the liquid manure, drained from dung hills, contains a large proportion of humic acid, which accounts for its fertilizing properties so well known in China and on the continent; and he found it also in peat earth, and in varying proportions in all sorts of turf. It appears probable, from Gay-Lussac having found a similar acid, (technically *Azumic acid*,) on decomposing the prussic acid, (technically *Hydrocyanic acid*,) that the humic acid may be found in animal blood, and if so, it will account for its utility as a manure for vines, &c. Dobereiner found the gallic acid convertible into the humic.

*Scientific Principles of Manuring.*—As the chief food of plants consists of carbonic acid gas, and humic acid, mixed with water, it is clear that every sort of manure, whether it be simple or mixed with other substances in form of compost, must be tried and judged, in the first place, by the proportion of carbonic acid gas and humic acid, which it contains, or may evolve after it has been applied; and in the second, by the quantity of water which it is able to take up and retain. This second test alone must not be trusted to, otherwise bog earth, a very sterile substance in its decomposed state, might be decided to be the best of all manures; nor will the first test always answer, otherwise chalk, (technically *carbonate of lime*,) would appear to be an excellent manure, and so it might be

under peculiar circumstances, and would be always, if it could be brought to take up and retain enough of water to dissolve a portion of it, which it can only do by means of humic acid.

*The Fermenting of Manures.*—It is the common opinion, that every sort of dung, when well rotted and reduced to a uniform dark brown mass, similar to fresh peat, so that it can be cut with a spade, is more valuable than when fresh and mixed with straw and other litter. There can be no question of this opinion being correct, though the doctrine at present held in books seem to oppose it, upon principles deduced from the experiments of Sir Humphrey Davy, made before the discovery of the effects of humic acid. The two tests of the quantity of carbonic acid gas contained in rotted and fresh dung, and the capacities of each for taking up and retaining water, would at once lead to the correct view of the subject, independently of ascertaining the proportion of humic acid.

With respect to water, there can be no question that rotten dung is very much superior, in imbibing and retaining it, to what is fresh, unfermented, or beginning to ferment, as may be easily ascertained in the way already described by those who doubt the fact. With respect to carbonic acid gas, humic acid, and the minor materials of the food of plants, there can be as little doubt of the superiority of rotten dung, which is in fact in a state very nearly approaching to the best leaf mould, or virgin loam, and though a weighed quantity of fresh dung certainly will yield more carbonic acid gas than when this same quantity is allowed to ferment and rot, in consequence of much of it being given off during these processes, yet the weighed quantity of fresh dung will bear no comparison in this respect with the rotted dung. The quantity of humic acid is very considerably greater in rotten dung.

Here then is the state of the question, which is so far one of economy, that there is a certain loss sustained by the dung during fermentation and rotting, in the same way as there is a loss sustained in roasting a piece of beef; but nobody, I think, except an Abyssinian, who likes raw beef cut from a living ox, would try to economize provisions by not roasting his beef, any more than a gardener would in not rotting his dung. The rotted dung accordingly, like roast beef, appears from what has been now stated, to be altogether superior quality as food, on a comparison of equal weights of it and fresh dung, particularly with regard to humic acid.

The recent practice of covering up fermenting dung with earth is founded on a smattering of chemistry, without a sufficient knowledge of its principles, for the earth can no more confine the carbonic acid given off during the fermentation of the dung below it, than a gauze balloon would confine gas enough to carry it up into the air; though this covering of earth will undoubtedly check very violent fermentation by partly keeping out the atmospheric air and rain water, the oxygen in either or both of which is indispensable to the process, it being this oxygen which forms

berry to Filbert street, known by the name of SECKEL'S Row; and a street in that city still bears the name of Seckel. It is well known that Lawrence Seckel always spelled his name in this manner."

From the same source we also learn that about two years ago, Joshua Longstreth of Philadelphia, a merchant of great respectability and distinction, in company with the Secretary of the Massachusetts Horticultural Society, paid a visit to the original tree. It stands in "The Neck" about five miles below the city, and about one mile above the confluence of the Delaware and Schuylkill rivers, on alluvial soil. One side of the trunk was decayed and gone; but the other half appeared healthy with vigorous branches well loaded with fruit. It had every mark of an ancient tree.

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From the New York Farmer.

#### INCREASING AND FERMENTING MANURE IN WINTER.

*Humic Acid and Humin.*—In most chemical books, the terms *Ulmis Acid* and *Ulm* are used, from *Ulmus*, elm; but as its substance occurs in moist, if not all plants, the name is bad. I prefer Sprengel's terms, *Humus*, soil.

This important substance was first discovered by Klaproth in a sort of gum from an elm; but it has since been found by Berzelius in all barks; by M. Braconnot in saw-dust, starch, and sugar: and what is still more interesting for our present purpose, it has been found by Sprengel and

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*From the Genesee Farmer.*

#### ON DRAFT HORSES.

Among the "BUBBLES from the Brunnens of Nassau," we observe some things well adapted to those who subsist on solid food; and for our present number we select a few remarks on the different methods of training horses to the draft. The writer's views are at least plausible; and if we can point the attention of judicious proprietors of teams to this subject, we shall hope that some good will be the result.

We have often witnessed the uneasy constraint which horses suffer from having their heads reined up too high; and it has appeared to us that when they find trouble enough to reach the ground with their fore feet on level roads, they must be prevented from exerting their strength in the best manner, more especially when they come to ascend a hill. But we will now introduce our author:

"I reluctantly acknowledge that I do verily believe [the German] horses are much more scientifically harnessed for slow, heavy draft, than ours are in England.

"Many years have now elapsed since I first observed that, somehow or other, the horses on the continent managed to pull a heavy carriage up a steep hill, or along a dead level, with greater ease to themselves than our English horses. Let any unprejudiced person attentively observe with what little apparent fatigue three small ill-conditioned animals will draw not only his own carriage, but very often that huge overgrown vehicle, the French diligence, or the German eil-wagon, and I think that he will admit that, somehow or other, there exists a mystery.

"The thing I want, if possible, to account for, is, how such small weak horses do manage to draw one's carriage up hill, with so much unaccountable ease to themselves.

"Now, in English, French and German harness, there exists, as it were, three degrees of comparison in the manner in which the head of the horse is treated; for, in England, it is elevated, or borne up, by what we call the bearing rein; in France it is left as nature placed it (there being to common French harness no bearing rein); and in Germany, the head is tied down to the lower extremity of the collar, or else the collar is so made, that the animal is by it deprived of the power of raising his head.

"Now, it is undeniable that the English extreme and the German extreme cannot both be right; and, passing over for a moment the French method, which is, in fact, the state of nature, let us for a moment consider which is best, to bear a horse's head up, as in England, or to pull it downwards, as in Germany.—In my humble opinion both are wrong; still there is some science in the German error: whereas in our treatment of the poor animal, we go directly against all mechanical calculation.

"In a state of nature, the wild horse, (as every body knows) has two distinct gaits or attitudes. If man, or any still wilder beast, come suddenly upon him, up goes his head; and as he first stalks and then trots gently away, with ears erect, snorting with his nose, and proudly snuffing up the air, as if exulting in his freedom; as one fore leg darts before the other, one sees before one a picture of doubt, astonishment, and hesitation,—all of which feelings seem to rein him, like a troop horse on his haunches; but attempt to pursue him, and the moment he defies you—the moment, determining to escape, he shakes his head, and lays himself to his work, how completely does he alter his attitude!—for then

down goes his head, and from the ears to the tip of his tail, there is in his vertebrae an undulating action which seems to propel him, which works him along, and which it is evident you could not deprive him of, without materially diminishing his speed.

"Now, in harness, the horse has naturally the same two gaits or attitudes; and it is quite true that he can start away with the carriage, either in one or the other; but the means by which he succeeds in this effort, the physical powers, which, in each case, he calls into action, are essentially different; for in the one attitude he works by his muscles, and in the other by his own dead, or rather living weight. In order to grind corn, if any man were to erect a steam engine over a fine, strong, running stream, we should all say to him, "Why do you not allow your wheel to be turned by cold water instead of by hot? Why do you not avail yourself of the weight of the water, instead of expending your capital in converting it into the power of steam? In short, why do you not use the simple resource which nature has presented ready made to your hand?" In the same way, the Germans might say to us, "We acknowledge a horse can drag a carriage by the power of his muscles, but why do you not allow him to drag it by his weight?"

"In France, and particularly in Germany, horses do draw by the weight; and it is to encourage them to raise up their backs, and lean downwards with their heads, that the German collars are made in the way I have described; that, with a certain degree of rude science, the horse's nose is tied to the bottom of his collar, and that the postillion at starting, speaking gently to him, allows him to get himself into a proper attitude for his draught.

"The horse, thus treated, leans against the resistance which he meets with, and his weight being infinitely greater than his draught (I mean the balance being in his favor,) the carriage follows him without much more strain or effort on his part, than if he was idly leaning his chest against his manger. It is true the flesh of his shoulders may become sore from severe pressure, but his sinews and muscles are comparatively at rest.

"Now, as a contrast to this picture of the German horse, let any one observe a pair of English post-horses, dragging a heavy weight up a hill, and he will at once see that the poor creatures are working by their muscles, and that it is by sinews and main strength the resistance is overcome; but how can it be otherwise? for their heads are considerably higher than nature intended them to be even in walking in a state of liberty, carrying nothing but themselves. The balance of their bodies is, therefore, absolutely turned AGAINST, instead of leaning in favor of, their draft; and thus cruelly deprived of the mechanical advantage of weight which every where else in the universe is duly appreciated, the noble spirit of our high fed horses induces them to strain and drag the carriage forward by their muscles; and if the reader will but press his hands down the back sinews of one of our stage-coach or post chaise horses, he will soon feel (though not so keenly as they do) what is the fatal consequence. It is true that, in ascending a very steep hill, an English postillion will occasionally unhook the bearing-reins of his horse; but the poor jaded creatures, training for years to work in a false attitude, cannot in one moment get themselves into the scientific position which the German horses are habitually encouraged to adopt; besides this we are so sharp with our horses—we keep them so constantly on the QUI VIVE, or, as we term it, in hand—that we are always driving them from the use of their

weight to the application of sinews.

"That the figure and attitude of a horse working by his sinews, is infinitely prouder than when he is working by his weight, (there may exist, however, false pride among horses as well as among men,) I most readily admit; and, therefore, for carriages of luxury, where the weight bears little proportion to the power of the two noble animals, I acknowledge that the sinews are more than sufficient for the slight labor required; but to bear the head of a poor horse at plough, or at any slow heavy work, is, I humbly conceive a barbarous error which ought not to be persisted in."

*From the Baltimore Farmer.*

#### AGRICULTURAL CHEMISTRY. No. 2.

The first object that presents itself for the consideration of the student in the science of agriculture, is gas, which may be defined to be, ALL PERMANENTLY ELASTIC FLUIDS, except the atmosphere.

Steam is only a mechanical division of water, the particles of which are separated by caloric, or heat; but no chemical union has in that state taken place between the particles, and as soon as the temperature is reduced the laws of affinity prevail between the separated particles, and it regains its former state of water. Not so of gas; it retains its elastic form under all degrees of temperature.

It is a fact now sufficiently ascertained, that the food of plants must be reduced into this state before it can be received into the vegetable mass. In the bowels of the earth, the manure is reduced by fermentation into a state of gas, and being mixed with the water in the soil, is then absorbed by the roots of plants, and carried into the circulation forming the sap. Different kinds of earth being discovered in the remains of vegetables, does not militate against this doctrine. For the earths and metals are likewise formed by a union of the same gases, combined with their peculiar bases, which are volatile. Clay, sand, and lime are composed, as we shall hereafter show, by the combination of oxygen gas, with the peculiar metallic bases which form these several earths. If then we may be permitted to suppose that the matter of these several bases, which are known to be extremely volatile, are present in the circulating sap, and we do not see why that supposition may not as well be indulged in as any others that are adopted, we shall then have present all the constituent principles of the earths, in a gaseous state; and by simply obeying the laws of affinity their particles will unite and compose the different earths within the vegetable substance.

The constituent principles of vegetable matter are very simple, and are reduced principally to these three, oxygen gas, hydrogen gas, and carbonic acid gas. To these three principles merely, all vegetable substances may be reduced:

All that endless variety of appearance, which present itself in the vegetable kingdom; the stately oak, and the tender daisy; the hardy lignumvitae, and the pulpy mushroom; the poisonous upas, and the healing balm; the nauseous assafoetida, and the sweet-scented rose; together with all the various colors, shades, and tints, presented to us in the flowers and foliage which cover the earth, have all been composed from the three gases we have mentioned. Not only in these different vegetables separately, do they compose such opposite substances, but from the same trunk, and from the same apparently homogenous mass of sap, are compounded substances as opposite in their qualities as any that have been mentioned:—for instance, the seed of the stupifying



poppy produces an oil as bland as the olive, and is cultivated in great quantities in France for table use; while from the milky juice extracted from its head, is produced opium of our shops; and the delicious pulp of the peach, encloses in its kernel a poison as deadly as arsenic.

All these various results are occasioned by a slight variation in the combination of these gases.

In our next number we will endeavor to show some of the properties of oxygen in the process of vegetation.

From the Genesee Farmer.

#### THE SECKEL PEAR.

We agreed with our respected correspondent, immediately on reading his letter at page 193 of our current volume, that "the name of the gentleman who first cultivated the fruit," was also the true name of this noted pear; and consequently that his uniform practice of spelling his own name, must be the standard orthography. Unwilling to depend solely on our own recollections however, though very distinct—and desirous that the point in difference should be speedily brought to a close,—we wrote without delay to our obliging and intelligent friend, Daniel Longstreth of Bucks co. for more particular and positive information. His knowledge of the city, well qualified him for the task; and though unexpected circumstances prevented an immediate answer, yet it has now arrived, and we present it herewith:

"The land on which the original tree stands belonged to Lawrence Seckel, a distinguished and public spirited merchant of Philadelphia. His store was in Market street. For many years he was one of the managers of the Pennsylvania Hospital. He owned a row of houses on the west side of Eighth street, from Mulberry to Filbert street, known by the name of SECKEL'S Row; and a street in that city still bears the name of Seckel. It is well known that Lawrence Seckel always spelled his name in this manner."

From the same source we also learn that about two years ago, Joshua Longstreth of Philadelphia, a merchant of great respectability and distinction, in company with the Secretary of the Massachusetts Horticultural Society, paid a visit to the original tree. It stands in "The Neck" about five miles below the city, and about one mile above the confluence of the Delaware and Schuylkill rivers, on alluvial soil. One side of the trunk was decayed and gone; but the other half appeared healthy with vigorous branches well loaded with fruit. It had every mark of an ancient tree.

From Lawrence Seckel this property passed into the possession of the late Stephen Girard, and it is now held by the Corporation of Philadelphia.

V.

From the New York Farmer.

#### INCREASING AND FERMENTING MANURE IN WINTER.

**Humic Acid and Humin.**—In most chemical books, the terms *Ulmis Acid* and *Ulmis* are used, from *Ulmus*, elm; but as its substance occurs in moist, if not all plants, the name is bad. I prefer Sprengel's terms, *Humus*, soil.

This important substance was first discovered by Klaproth in a sort of gum from an elm; but it has since been found by Berzelius in all barks; by M. Braconnot in saw-dust, starch, and sugar; and what is still more interesting for our present purpose, it has been found by Sprengel and

M. Polydore Boullay to constitute a leading principle in soils and manures. Humin appears to be formed of carbon and hydrogen, and the humic acid of humin and oxygen. Pure humin is deep blackish brown, without taste or smell, and water dissolves it with great difficulty and in small quantities; consequently it cannot, when pure, be available as food for plants.

Humic acid, however, which, I may remark, is not sour to the taste, readily combines with many of the substances found in soils and manures, and not only renders them, but itself also, easy to be dissolved in water, which in their separate state could not take place. In this way humic acid will combine with lime, potass, and ammonia, in the form of humates, and the smallest portion of these will render it soluble in water and fit to be taken up by the spongelets of the root fibres.

It appears to have been from ignorance of the important action of the humic acid in thus helping to dissolve earthy matters, that the older writers were so puzzled to discover how lime and potass got into plants, and it seems also to be this chiefly which is so vaguely treated of in the older books, under the names of *extractive*, *vegetable extract*, *musiluginous matter*, and the like. Saussure, for instance, filled a large vessel with turf, and moistened it thoroughly with pure water, when by putting 10,000 parts of it by weight under a heavy press, and filtering and evaporating the fluid, he obtained twenty six parts of what he termed *extract*; from 10,000 parts of well dunged and rich kitchen garden mould he obtained ten parts of *extract*; and from 10,000 parts of good corn field mould, he obtained four parts of *extract*.

M. Polydore Boullay found that the liquid manure, drained from dung hills, contains a large proportion of humic acid, which accounts for its fertilizing properties so well known in China and on the continent; and he found it also in peat earth, and in varying proportions in all sorts of turf. It appears probable, from Gay-Lussac having found a similar acid, (technically *Azumic acid*,) on decomposing the prussic acid, (technically *Hydrocyanic acid*,) that the humic acid may be found in animal blood, and if so, it will account for its utility as a manure for vines, &c. Dobereiner found the gallic acid convertible into the humic.

**Scientific Principles of Manuring.**—As the chief food of plants consists of carbonic acid gas, and humic acid, mixed with water, it is clear that every sort of manure, whether it be simple or mixed with other substances in form of compost, must be tried and judged, in the first place, by the proportion of carbonic acid gas and humic acid, which it contains, or may evolve after it has been applied; and in the second, by the quantity of water which it is able to take up and retain. This second test alone must not be trusted to, otherwise bog earth, a very sterile substance in its decomposed state, might be decided to be the best of all manures; nor will the first test always answer, otherwise chalk, (technically *carbonate of lime*,) would appear to be an excellent manure, and so it might be

under peculiar circumstances, and would be always, if it could be brought to take up and retain enough of water to dissolve a portion of it, which it can only do by means of humic acid.

**The Fermenting of Manures.**—It is the common opinion, that every sort of dung, when well rotted and reduced to a uniform dark brown mass, similar to fresh peat, so that it can be cut with a spade, is more valuable than when fresh and mixed with straw and other litter. There can be no question of this opinion being correct, though the doctrine at present held in books seem to oppose it, upon principles deduced from the experiments of Sir Humphrey Davy, made before the discovery of the effects of humic acid. The two tests of the quantity of carbonic acid gas contained in rotted and fresh dung, and the capacities of each for taking up and retaining water, would at once lead to the correct view of the subject, independently of ascertaining the proportion of humic acid.

With respect to water, there can be no question that rotten dung is very much superior, in imbibing and retaining it, to what is fresh, unfermented, or beginning to ferment, as may be easily ascertained in the way already described by those who doubt the fact. With respect to carbonic acid gas, humic acid, and the minor materials of the food of plants, there can be as little doubt of the superiority of rotten dung, which is in fact in a state very nearly approaching to the best leaf mould, or virgin loam, and though a weighed quantity of fresh dung certainly will yield more carbonic acid gas than when this same quantity is allowed to ferment and rot, in consequence of much of it being given off during these processes, yet the weighed quantity of fresh dung will bear no comparison in this respect with the rotted dung. The quantity of humic acid is very considerably greater in rotten dung.

Here then is the state of the question, which is so far one of economy, that there is a certain loss sustained by the dung during fermentation and rotting, in the same way as there is a loss sustained in roasting a piece of beef; but nobody, I think, except an Abyssinian, who likes raw beef cut from a living ox, would try to economize provisions by not roasting his beef, any more than a gardener would in not rotting his dung. The rotted dung accordingly, like roast beef, appears from what has been now stated, to be altogether superior quality as food, on a comparison of equal weights of it and fresh dung, particularly with regard to humic acid.

The recent practice of covering up fermenting dung with earth is founded on a smattering of chemistry, without a sufficient knowledge of its principles, for the earth can no more confine the carbonic acid given off during the fermentation of the dung below it, than a gauze balloon would confine gas enough to carry it up into the air; though this covering of earth will undoubtedly check very violent fermentation by partly keeping out the atmospheric air and rain water, the oxygen in either or both of which is indispensable to the process, it being this oxygen which forms



the carbonic acid gas by uniting with the carbon in the dung.

Fresh dung, if, like that of rabbits, pigeons, poultry, and sheep, it be somewhat difficult to dissolve in water, will prove injurious, in consequence of the portion dissolved being too acrid, from containing a great quantity of ammonia; and hence it must either be well rotted, with the loss of more than half its substance, or so broken down and mixed with sharp sand, or diffused in water as not to concentrate its ammonia or other acrid principles, which might otherwise burn the plants, as it is not inappropriately termed. For the same reason, the draining of dunghills and urine ought always to be diluted with at least three-fourths of water before being applied. In this way they become excellent manures from containing so large a proportion of the important principle of humic acid.

*Composts.*—It having been found that the most fertile soils are those which contain a mixture of various ingredients, the conclusion was obvious, that soils artificially composed of the same or similar materials, would prove similarly fertile. This gave origin to the various compositions termed composts, whose value must of course be tried, like that of individual manures, by the two leading tests of their capability of taking up and retaining water.

Compost heaps or pies must be managed on the general principles of chemistry already detailed, particular care being taken to guard against loss. Lime, for example, if mixed in a compost heat with rich old soil or rotten dung, will take up and render useless the carbonic acid gas which they contain, and can only be used where there is much woody fibre difficult to be broken down. Bog earth mixed with fermenting dung, forms a good compost; as does also all vegetable refuse, such as weeds, young shoots of trees, and turf from hedge banks or road sides.

Having given the science of manufacturing manures, we subjoin the opinion of a practical farmer. It is contained in answer to numerous questions put by the Board of Agriculture of the Eastern Shore of Maryland, to Governor Stevens. We would remark however, in reference to the opinion of Professor Rennie, respecting the inutility of coverings of some kinds of soils to prevent the escape of evolved gases, that carbonic acid gas being heavier than the atmosphere, it will settle down into the openings, and thus in time become absorbed by the liquids and rains:

What are your means of making manure and the means you adopt?

*Answer.*—I am a strong advocate for compost manure, when it can be made with economy, which should be strictly attended to by every farmer. My usual habit is, as soon as I get my wheat trodden out, and my corn secured in the fall, to litter my farm yard (and if my cultivation is far off, I select some warm spot near the field) with leaves and pine shatters, (preferring the former.) I then draw in a quantity of corn stalks, which I repeat at every convenient period, so as to have the greatest part of them in before Christmas,

where I pen my cattle, having a shelter for them; my racks are then filled with straw—the stalks not only afford good feeding, but, when trampled on and broken up, they present an excellent bed to receive the urine and dung of the cattle. During the winter, I draw in dirt, leaves, hog beds, rotten pine stumps, and every thing which I think will add to the quantity and quality of the manure. My horses are well littered with straw, and sometimes with pine shatters; the stables well cleaned out, and the manure deposited near the door in a long bed, where dirt, marl, &c. &c. are drawn on until well covered about six inches deep, the manure again spread on every morning, as taken from the stable, until the dirt is covered about six inches deep and so continued through the winter, alternating the dirt and manure, which prevents the fertilizing salts of the manure from flying off, and converts the dirt to good manure.

In the spring I select some favorable spot near where I propose to use my manure, which I denominate my *summer cowpen*, into which I draw leaves and shatters, then the remnant of my corn stalks, which are not exhausted during the winter, there I pen my cattle every night, during the summer and fall, until the weather forces me into winter quarters, with positive orders never to turn them out in the morning until they are hurried round the pen five or six times by the cow boy, by which means much manure is preserved, which would otherwise be scattered out of the pen, as all stock feel disposed to dung immediately after they are disturbed, not forgetting to replenish my pen whenever I deem it requisite with dirt, mud, marl, weeds, &c, and every thing which will be beneficial, which I use the following spring—for, rest assured, the *manure bank* is the farmer's *gold mine*, out of which he digs all his wealth and independence.

In what state ought manure to be hauled out into the field to impart most benefit to land and crop?

*Answer.*—On this question a variety of opinions exist, but I will, in a concise manner, state mine. Much depends on the kind of soil; if a hard, stiff, white oak clay bottom, I should not hesitate to pronounce the half rotted manure preferable, inasmuch as it will tend to open the pores, and divide the stiff, adhesive particles, and more freely admit the dews and rains, leaves the land in a better condition, and advances the crop. But should your land be of a different complexion, say light loam or sandy, I would then advise the manure to be applied in a well rotted state near the surface.

For the Maine Farmer.

MR. HOLMES: In several back numbers of your paper, and in other papers, I have observed that sour or fermented food is asserted to be more nutritive, and will fatten swine faster than the same kind of food before it becomes thus stale, without giving the WHY and the WHEREFORE. I hope some of those writers will let us know the reason why it so, which I doubt.

CAUSE AND EFFECT.

## SUMMARY.

At a meeting of the Ken. Co. Ag. Society, held Sept. 18, 1834, the following gentlemen were elected members, viz:

F. Aborn, Augusta—Ebenezer Shaw, Stewart Foster, Francis Fuller, 2d., & Thomas S. Pullen, Winthrop—E. Folsom, Monmouth.

## LATE FROM EUROPE.

Intelligence has been received at New York, from London to the 15th, and from Liverpool to the 17th August, inclusive. The Journal of Commerce supplies with the following items of news:

Parliament was prorogued on the 15th. The two Houses appear to have been thoroughly pitted against each other for some days previous to the prorogation.

In the House of Lords, Aug. 11, after an animated debate, the Irish tithes bill was *refused a second reading*, by a vote of 189 to 122. Majority against the second reading, 67.

The Poor Laws Amendment Bill passed the House of Commons on the 8th, after some amendments.

The King gave his royal assent to the Church Temporalities (Ireland) Bill, the Court of Chancery (Ireland) Bill; the Registration of Voters (Scotland) Bill; the South Australian Colonization Bill; the Sale of Beer Bill, and several other bills.

Gen Rodil entered Elisondo, the Court town of Don Carlos, on the 6th, at the head of 7000 men. Don Carlos fled, taking the direction of Leeza.

M. Dupin has been elected President of the French Chamber of Deputies, having received 247 votes out of 321.

*Descension.*—Mr. Norcross made his "submarine descension" on Friday afternoon, on the north side of the Western Avenue, before a crowd of about 2000 people. He left Braman's Bath at 5 P. M. in a boat with several of his friends, which was brought to about 200 yards west of the Bath. He then affixed to his head the apparatus weighing 75 lbs. and resting upon his shoulders, with his India rubber dress attached. At half past 5, he descended where the water was nine feet deep, and walked the distance of a quarter of a mile, towing the boat; when he ascended and wished to know if the spectators were satisfied—if not he would descend again. The unanimous reply was, "you have done well; we are satisfied." He then took of his apparatus and landed amid the hearty cheers of the multitude.

M. N. Room.

Correspondence of the Philadelphia Gazette.

## MASSACRE OF WYOMING.

WILKESBARRE, Pa. Sept. 1834.

After one of the most romantic rides, through the lovely valley of Wyoming, where the powers of language fail to convey the enjoyment that every traveller must partake, and that we deeply felt, we arrived at Wilkesbarre, at 10 A. M. and after a little refreshment set off to visit the Monument, now being erected at Wyoming, 5 or 6 miles distant. We there found a very obliging old man, who took pleasure in communicating to us, all the information in his power. The monument is on the highest spot of ground in the neighborhood, and erected over the bones of the unfortunate sufferers, in the massacre of Wyoming, fifty-four years ago. We visited also an old lady, remarkably intelligent for her age, whose maiden name was Butler. Her father was one of the first forty who ventured from Connecticut into that valley, (then a wilderness,) and afterwards removed their families. There they built a fort, called the Forty Fort, and hearing that the Indians were on the eve of attacking them they retired into it, but became impatient of their confinement, and in the ardor and rashness of youth, more than three hundred sallied forth to meet the enemy, leaving the women and children behind them. They chose the place where the monument now stands, on account of its elevation, for waiting the approach of the Indians, whom they did not expect of being so near; but the blood-thirsty men of the forest, bribed and



instigated by the English, were concealed among the bushes, and rushed upon them with overpowering force. A few escaped and ran to the river, but some even of these were shot while they were swimming over; the rest were cruelly slaughtered.

The Indians removed their own slain, but left the others lying on the field, and hastening to the village, burnt down every dwelling; then proceeding to the fort, (in which was at the time, the old lady, above mentioned, then a young girl) ordered every individual, infants, mothers, and aged women, to leave it in three hours, under pain of death. Easton, 40 miles distant, was the nearest settlement, and thither the poor creatures bent their steps. Many, however, perished on the way. At the end of six weeks, some of the men ventured back to the scene of their woes, hoping to find the bones of their slaughtered companions; but to their surprise every corpse was as perfect as on the day of the massacre; they had dried and could be recognized. They were interred on the spot, and 50 years afterwards the bones were taken up, to be enclosed in a durable box, and placed in one corner of the monument, with due solemnities. Three hundred skulls were found, the most perfect of which have been preserved, and are kept in a little building close by, for the inspection of visitors. We examined them and found on every one the mark of the scalping knife. In some were large round holes made by the bullets, in others, fractures and holes, two inches in diameter, the work of the murderous tomahawk. We were exceedingly interested by all we saw and heard, and the old lady appeared gratified by the interest we exhibited.

**A Snake Story.** On board the ship Wm. Byrnes, which arrived here a few days ago, from Mazatlan, in the Gulf of California, amongst the dye wood which was taken in at that place, a snake of the boa constrictor species, seized with a desire to emigrate, contrived to find his way on board, and ensconced himself snugly in the state room of the mate, whose companion he determined to be, although every effort was made to capture him, without avail, during the passage. In discharging a part of the cargo, on Monday, the skin of his snakeship was found, having changed it for another coat. A search was then made for him, when he was at last discovered in the cabin, and, by throwing a cloth over him, he was secured, and put in a bottle, where a stopper was put upon his further peripatations. The snake is about three and a half feet long, the thickness of a man's finger, and gradually tapers off to a point the size of an ordinary darning needle. For a day he may be seen at this office, confined in a glass bottle, alive, and perfectly in spirits, though darting forth his tongue with all the venom of a disappointed politician. His eye has been the admiration of all who have seen him.

*New York Star.*

**Yankee Enterprise.**—The brig Margaret which sailed from this port on Wednesday last for Savannah, carried out a party of nine hardy and industrious Yankees, to pursue lumbering operations upon the Little Ocmulgee river in the State of Georgia. These men are employed by the Company residing principally in this city, which we mentioned last winter as having purchased a large tract of timber in that State. The growth of timber upon their land is chiefly the long leaf yellow pine, which produces durable and most excellent lumber, the use of which, is daily increasing in this country and abroad. This company has, we understand, four mills containing 18 saws already in operation, together with a flour mill and a well stocked plantation around the mills. Their intention is to operate by northern labor and to keep a constant supply of every species of lumber at Darien, near the mouth of the Altamaha. Upon this river, much the largest in the State, there are now plying two steamboats which go past, and within a mile of the company's property.

The Altamaha, something over 100 miles from its mouth, divides into two large branches, which are named the Ocmulgee and Oconee rivers; upon the latter is situated Milledgeville, the capital of the State, and upon the other, equally distant

from the junction, the flourishing town of Macon. Between these large rivers, within the limits of steamboat navigation, within 50 miles of the capital, and in the very center of the State lies the tract of 700,000 acres purchased by the company whose enterprise we are noticing. We wish success and prosperity to their undertaking.

*Portland Courier.*

**Shocking Steamboat Accident.** A melancholy occurrence took place on board the steamer Lady of the Lake, Capt Nichols, early on the morning of Sunday the 7th inst. Just as the boat was about leaving the Queen's wharf, at Quebec, for Montreal, the boiler burst, and all the persons, eight in number, who occupied the middle cabin were so badly scalded as to survive but a few hours. Their names are Wm Roulston and Ellen his wife, their four children, Ellen, Archibald, Jane and Robert, Grace Purvis their servant, (all from Leith,) and Thomas Moffatt, a child. It was proved that the boiler was so much corroded as to be eaten half through—and although no criminal intent could be proved or imagined, yet such was the culpable negligence of the Captain and Engineer that the coroner's jury levied a demand of £50 upon the boiler. Mr Roulston was a man in easy circumstances, and has a brother residing in Philadelphia. The Engineer was intoxicated at the time of the accident. This was the first fatal accident that had occurred upon the St Lawrence, since the introduction of steam upon it, twenty three years ago.

**From Charleston and Savannah.** A violent gale commenced at Charleston the 3d; but it does not appear that any material damage was done in the city or the harbor. At Georgetown several vessels were injured, and some were sunk. Much apprehension was entertained respecting the rice and cotton crops, from the rise of the water in the streams. The storm was very severe in parts of North Carolina.

At Savannah, on the 4th, 25 cases of cholera had been reported from the commencement on Weightman's plantation, and 8 deaths. On the 4th, there was no death in the city, and on the 5th one. A quarantine had been ordered by Gov. Hayne, on all vessels arriving from that port.

The Roxbury India Rubber Factory are now making a suit of sails of India Rubber Cloth, for a small vessel.

#### MARRIAGES.

In this town, on Tuesday morning last, by Samuel P. Benson, Esq. Mr Addison B. Page of Hartford, Conn. to Miss Sophronia Page of this town.

In Hallowell, Mr. John Carter to Miss Mary Johnson.

#### DEATHS.

In this town, on the 21st inst. of fever, Mrs. LAVINIA C. wife of Mr Thomas S. Pullen, aged 28. Mrs P was an amiable woman, and highly esteemed by her circle of acquaintance. While her husband and family are overwhelmed in grief, they can receive consolation from the hope that she has exchanged this world for a better—that she rests in the arms of her Redeemer.

In this town, on the 23d inst. Mrs CAROLINE, wife of Mr Simon B. Prescott, aged 26.

#### BRIGHTON MARKET—MONDAY, Sept. 8.

(Reported for the Boston Daily Advertiser & Patriot.)

At Market 950 Beef Cattle; 740 Stores; 6200 Sheep, and 1140 Swine. Several parts of lots Beeves; Stores Sheep and swine unsold.

**PRICES.** Beef Cattle.—Sales were more even this week. We quote to correspond with last week, viz. prime at 4 75 a 5; good at 4 45; thin 3 25 a 3 75.

**Stores.**—Our prices range so as to comply with eastern and northern viz. yearlings at \$6 a 9; two years old \$10 a 15; three year old \$19 a 25.

**Working Oxen.**—We noticed a few yoke sold at \$48, 55, 64, 65, 78 and 80.

**Cows and Calves.**—Sales were effected at \$18, 23, 25, 28 and 33.

**Sheep.**—"Dull, dull." Lot of middling quality were taken at 1 25, 1 33, 1 37, 1 42, 1 50, 1 54, 1 62, 1 67, and 1 88. Weathers, some of which were very fine, at 2, 2 50, 2 75 and \$4.

**Swine.**—The large number at market caused prices to decline; one lot, most of which were old, half, barrows, at 4c; a lot old and young at 4c for sows and 5c for barrows; a lot of shoats, half barrows at 4 5-8 and one lot at 4 3-4c; at retail 5 for sows and 6c for barrows.

**LEWIS P. PARLIN, M. D.**  
PHYSICIAN, SURGEON,  
AND  
SURGEON DENTIST,  
READFIELD, ME.

#### NOTICE,

CAME into the enclosure of Isaac Shaw, of this town, on Sunday the 13th inst. a *SOW*, to appearance a year old or more, has had pigs and is low in flesh. The owner is requested to take her away.  
Winthrop, Sept. 22, 1834.

#### NOTICE.

THE Selectmen of Winthrop give notice, that they will be in session at their office; for the purpose of accommodating those who may have accounts against said town, and for other business, on the last Saturdays of each month during the remainder of the political year, from 1 to 5 o'clock, P. M. J. MAY, per order.

September 24th, 1834.

N. B.—The School Agents are reminded that the time has long since past which the law allows them to make a return of the number of scholars. Immediate attention to this subject is requested.

#### STRAY HORSE.

STRAYED or stolen from the pasture of Isaac Stinchfield in Leeds, on the 10th inst. a light gray Horse, about nine years old, of a middling size,—was in good order. Said Horse was almost white on his back and neck—had a switch tail—fore top cut off snug—and a small black spot on the front of his shoulder—had a slope hump, and not a natural trotter—was owned in Belfast. Whoever will return said horse to Isaac Stinchfield in Leeds, or to me in Belfast, shall be handsomely rewarded.

SULLIVAN HICKS.

Sept. 17, 1834.

#### THE NEW-YORKER.

UNDER this title, a new Literary Journal of the largest imperial size, was issued by the subscriber on Saturday the 22d of March. Its leading features are as follows:

"THE NEW-YORKER" is equal in size and execution to any of the literary weeklies of this city, and at the same time afforded at a much lower rate than the cheapest of them. It will combine more completely than any of its immediate rivals the distinguishing characteristics of a literary journal with those of a regular and systematic chronicle of passing events. In short it is designed to commend itself as a general newspaper, alike acceptable to the lover of literature, the devoted of business, and the gleaner of intelligence. It will contain—1. *Literature of the Day*—embracing Reviews of New Publications, Original Tales, Essays, Poems, &c. with selections from the whole range of English and American periodical literature.

2. *General Intelligence*—comprising the current News of the Day, foreign and domestic, whether civil or political carefully avoiding, however, the least semblance of partisan bias in politics, and confined strictly to the presentation of a general and impartial account of the movements of all parties whatever, without discrimination and without the exhibition of personal preference.

Should their journal receive the approbation and support of the public, the undersigned pledge themselves to spare neither exertions nor expense to render its literary character and general interest at least equal to those of its contemporaries; and, whatever may be the measure of their encouragement, they confidently assert that it shall be excelled by a few in quantity of matter or in the variety and originality of its contents.

H. GREELEY & CO.

New York March 22, 1834.

The New Yorker has no connection whatever with an ephemeral affair with the same title, which was published last season; but in order to free our good name from all approbrium, we hereby agree to send our paper GRATEFULLY to all the patrons of that concern for which they have paid the publisher thereof.

Office 114 Fulton Street.

#### CONDITIONS.

The New Yorker is published every Saturday morning on a large imperial Sheet, containing twenty four wide and closely printed columns, and forwarded to its patrons whether in city or country, at the rate of TWO DOLLARS per annum, payable in advance. When payment is delayed till the end of the second quarter, fifty cents will be added.

Any person procuring us six subscribers in the country, and forwarding \$10 free of postage, will be entitled to the remainder for his trouble, and in the same proportion for a larger number. Companies uniting in a remittance will be supplied on the same terms.

Postmasters, Booksellers, and General Agents for the circulation of periodicals are respectfully solicited to intercalate themselves in our behalf, and are hereby assured that they shall in all cases receive the highest remuneration which the low price of our paper will enable us to give.

Subscriptions received at this Office.



## POETRY.

## HYMN,

BY T. G. FESSENDEN.

*There is nothing better for a man than that he should eat and drink, and enjoy good in his labor.*—Ecc. ii. 24.

With thankful heart to eat and drink,  
Be happy while you can,  
And reap the produce of your toil,  
Is God's behest to man.

And he who thankfully enjoys  
Each boon, which life affords,  
With scant subsistence is more blest  
Than misers with their hoards.

For only what we rightly use  
Is really our own;  
The rest is yielded to the winds,  
Or left to heirs unknown.

Yet many a miser makes himself  
A wretched guilty slave;  
Although he cannot tell for whom  
He toils and plays the knave.

Both soul and body he devotes  
To Mammon and to care,  
And gains alone the paltry post  
Of steward to his heir.

To give some graceless wretch a chance  
To dissipate his pelf,  
He plots and labors till he brings  
Damnation on himself.

With temperance then to eat and drink,  
Be happy while you can;  
Enjoy the produce of your toil,  
Is Heaven's behest to man.

## MISCELLANY.

From the New England Galaxy.

## HUMAN LIFE,

OR THE FIRST AND LAST MINUTE.

*Minutes pass.*—The anxious husband paces slowly across his study. He is a father a man child is born unto him. *Minutes pass*—the child has been blessed by a parent, whom it cannot recognize, and pressed to that bosom, to which instinct alone guides for sustenance—the young wife too has faintly answered to a husband's questions, and felt his warm kiss on her forehead.

*Hours pass.*—The low moanings from the closely covered cradle, tell of the first wants of its infant occupant. The quiet tread of the nurse speaks of suffering around her; while her glad countenance says that the very suffering which she is trying to alleviate, is a source of joy; and the nameless articles, which from time to time she arranges on the hearth, tell of a new claimant for the courtesies and attentions of those who have progressed further on the pathway of existence.

*Days pass.*—Visitors are thronging the chamber, and the mother, pale and interesting after her recent sickness, is receiving their congratulations, and listening proudly to their praises of the little treasure, which lies asleep in its rocking bed at her feet. The scene shifts, and the father is there with her alone, as the twilight deepens about them, while they are planning the future destiny of their child.

*Weeks pass.*—The eyes of the young mother are sparkling with health, and the rose blooms again on her cheek, and the cares of pleasure and home engage her attention, and the father is once more mingling with the world; yet they find many opportunities each day to visit the

young inheritor of life; to watch over his dreamless slumber—to trace each other's looks in his countenance, and to ponder upon the felicity, of which he is the bearer of them.

*Months pass.*—The cradle is deserted.—But the chamber floor is strewn with playthings, and there is a little one loitering among them whose half lisped words, and hearty laugh, and sunny countenance tell you, that the entrance into life is over a pathway of flowers. The cradle is empty but the last prayer of the parents is uttered over the small crib, which stands by their own bedside, and their latest attention is given to the peaceful breathings of its occupant.

*Years pass.*—Childhood has strengthened into boyhood and gambolled along into manhood. Old connexions are broken—parents are sleeping in their graves—new intimacies are formed—a new home is about him, new cares distract. He is abroad, struggling amid the business of life, or resting from it with those whom he has chosen from his own generation. Time is beginning to wrinkle his forehead, and thought has robbed his looks of their gaiety, and study has dimmed his eyes. Those who began life, after he had grown up, are fast crowding him out of it, and there are many claimants upon his industry and love for protection and support.

*Years pass.*—His own children have become men, and are quitting him, as he also quitted the home of his fathers. His steps have lost their elasticity—his hand has become familiar with the cane, to which he is obliged to trust in his walks. He looks anxiously in each day's paper among the deaths—and then ponders over the name of an old friend, and tries to persuade himself, that he is younger, and stronger, and has a better hold upon life than any of his contemporaries.

*Months pass.*—He gradually diminishes the circle of his activity. He dislikes to go abroad where he finds so many new faces: and he grieves to meet his former companions after a short absence, they seem to have grown so old and infirm.—Quiet enjoyments only are relished,—a little conversation about old times—a sober game at whist—a religious treatise,—and his early bed, form for him the sum total of his pleasures.

*Weeks pass.*—Infirmary keeps him in his chamber. His walks are limited to the small space between his easy chair and his bed. His swollen limbs are wrapped in flannels. His sight is failing—his ears refuse their duty, and his cup is but half filled, since otherwise his shaking hands cannot carry it to his shrunk lips without spilling its contents. His powers are weakened—his faculties blunted—his strength is lost.

*Days pass.*—The old man does not leave his bed—his memory is failing—he talks but cannot be understood—he asks questions, but they relate to the transactions of a former generation—he speaks of occurrences, but the recollection of no one around him can go back to their scenes—he seems to commune with comrades, but

when he names them, it is found that the waters of time and oblivion have long covered their tombs.

*Hours pass.*—the taper grows dimmer and dimmer—the machinery moves yet more and more slowly—the sands are fewer as they measure the allotted span. The motion of those about him is unheeded, or becomes a vexation. Each fresh inquiry after his health is a knell. The springs of life can no longer force on its wheels—the 'silver chord' is fast untwisting—the pitcher is broken at the fountain—and time 'is a burthen'. His children are about him but he heeds them not—his friends are near, but he does not recognize them. The circle is completed. The course is run—and utter weakness brings the damp, which ushers in the night of death.

*Minutes pass.*—His breathing grows softer and lower—his pulse beats fainter and feebler. Those around him are listening, but cannot tell when they cease. The embers are burnt out—and the blaze flashes not before it expires. His 'three score years and ten, are numbered. Human life 'is finished.'

## To all who have teeth.

A RECENT DISCOVERY TO PREVENT THE FUTURE REMOVAL OF THE DEPOSITS.

THE ELECTRIC ANODYNE is a compound Medicine recently invented by Joseph Hiscock, Esq. Its use in a vast number of cases has already proved it to be a prompt, effectual and permanent remedy for the tooth-ache and ague, and supersedes the necessity of the removal of teeth by the cruel and painful operation of extraction. In the most of cases where this medicine has been used it has removed the pain in a few minutes, and there have not yet been but a few cases where a second application of the remedy has been necessary. This medicine has the wonderful power, when applied in the proper manner, which is externally on the face, [see the directions accompanying the medicine] of penetrating the skin, and removing the pain instantaneously; and what gives immense value to the article is, that when the pain is once removed it is not likely ever to return. The extensive call, and rapid sale of this medicine has put it in the power of the General Agent to afford it for the reduced price for which he offers it to the public, thereby transferring to the poorest individuals in the community the power of relieving themselves from the suffering of tooth-ache for a small compensation.

The General Agent has in his possession a great number of Certificates, proving the efficacy of the Electric Anodyne, but deems it unnecessary here to publish any but the following one.

We, the subscribers, having made a fair trial of the Electric Anodyne, can cheerfully recommend it to the public generally as a safe, efficacious and sure remedy for tooth-ach and ague,

Z. T. Milliken,  
Francis Butler,  
Jonathan Knowlton,  
Thomas D. Blake, M. D.  
Jas Gould.

The Electric Anodyne is manufactured by the inventor, and sold wholesale by the subscriber.

ISAAC MOORE, Farmington, Me.  
Sole General Agent.

BENJAMIN DAVIS, Esq. Augusta, Agent for the State of Maine, will supply all the sub-agents in this State, who are already, or may be hereafter appointed to retail the Electric Anodyne. All orders on the State Agent, must be post paid.

The following gentlemen have been duly appointed sub-agents, who will keep constantly a supply of the Electric Anodyne, and will promptly attend all orders from customers. Price 75 cents per bottle.

Joseph C. Dwight, Hallowell; John Smith, Readfield; David Stanley, Winthrop; Wm. Whittier, Chesterville; Upham T. Cram, Mt. Vernon; George Gage, Wilton; Cotton T. Pratt, Temple; Z. T. Milliken, Farmington; James Dinmore, Milburn and Bloomfield; E. F. Day, Strong; Reuben Bean & Co. Jay; Seth Delano Jr. Phillips; Fletcher & Bates Norridgewock; J. M. Moore & Co. Waterville; Enoch Marshall, Vassalborough.

N. B. To prevent fraudulent speculation the papers of directions accompanying each bottle has the written signature of the Sole General Agent.

Farmington, May 6, 1834.